

WHAT IS CLAIMED IS:

1. A gas recycling system comprising:

carbon dioxide collecting means for collecting gas containing carbon dioxide from a carbon dioxide source; and

replacing means for replacing at least part of gas containing sulfur hexafluoride used as an electric insulation medium in a gas-insulated electric device, with the carbon dioxide obtained by the carbon dioxide collecting means.

2. The gas recycling system according to Claim 1, further comprising:

sulfur hexafluoride collecting means for collecting gas containing sulfur hexafluoride which was used in the gas-insulated electric device and was replaced with the carbon dioxide;

sulfur hexafluoride refining means for increasing sulfur hexafluoride purity in the gas containing sulfur hexafluoride obtained by the sulfur hexafluoride collecting means; and

means for reutilizing the sulfur hexafluoride gas obtained by the sulfur hexafluoride refining means, for a purpose other than electric insulation.

3. The gas recycling system according to Claim 1, further comprising:

carbon dioxide refining means for increasing carbon dioxide purity in the gas containing carbon dioxide gas obtained by the carbon dioxide collecting means, wherein

the replacing means is constructed to replace the at least part of gas containing sulfur hexafluoride with the carbon dioxide obtained by the carbon dioxide collecting means.

4. The gas recycling system according to Claim 1, wherein the carbon dioxide source includes an electric power generation device.

5. A gas recycling method comprising:

collecting gas containing carbon dioxide from a carbon dioxide source; and

replacing at least part of gas containing sulfur hexafluoride used as an electric insulation medium in a gas-insulated electric device, with the carbon dioxide obtained by the carbon dioxide collecting step.

6. The gas recycling method according to Claim 5, further comprising:

collecting gas containing sulfur hexafluoride

which was used in the gas-insulated electric device and was replaced with the carbon dioxide;

increasing sulfur hexafluoride purity in the gas containing sulfur hexafluoride obtained by the sulfur hexafluoride collecting step; and

reutilizing the sulfur hexafluoride gas obtained by the sulfur hexafluoride purity increasing step, for a purpose other than electric insulation.

7. The gas recycling method according to Claim 5, further comprising:

increasing carbon dioxide purity in the gas containing carbon dioxide gas obtained by the carbon dioxide collecting step, wherein

the replacing step is constructed to replace the at least part of gas containing sulfur hexafluoride with the carbon dioxide obtained by the carbon dioxide purity increasing step.

8. The gas recycling method according to Claim 5, wherein the carbon dioxide source includes an electric power generation device.

9. A gas-insulated electric device comprising:  
at least one electric conductor;  
a tank containing the at least one electric

conductor;

a solid insulator connected to the tank; and  
insulation gas sealed in the tank,

wherein the insulation gas includes carbon dioxide which has been stored after being collected as gas containing carbon dioxide from a carbon dioxide source and increased in carbon dioxide purity in the gas containing carbon dioxide.

10. A sulfur hexafluoride supplying system comprising:

collecting means for collecting gas containing sulfur hexafluoride emitted from a gas-insulated electric device by replacing the gas containing sulfur hexafluoride with an electric insulation gas having a lower global warming potential than the gas containing sulfur hexafluoride;

refining means for increasing purity of sulfur hexafluoride in the gas containing sulfur hexafluoride collected by the collecting means; and

a container for storing the gas containing sulfur hexafluoride increased in purity of sulfur hexafluoride by the refining means.

11. The sulfur hexafluoride supplying system according to Claim 10, further comprising:

means for recording amount of the gas having a lower global warming potential than the gas containing sulfur hexafluoride;

means for recording amount of the gas containing sulfur hexafluoride stored in the gas-insulated electric device;

means for recording amount of the gas containing sulfur hexafluoride which is collected by the collecting means; and

means for recording amount of the gas containing sulfur hexafluoride stored in the storing means.

12. A gas-insulated electric device comprising:

at least one electric conductor;

a tank containing the at least one electric conductor;

a solid insulator connected to the tank; and

insulation gas sealed in the tank, the insulation gas having a lower global warming potential than sulfur hexafluoride,

wherein at least part of the tank was used for containing sulfur hexafluoride as an electric insulation medium.